

## CLAIMS

1. A method comprising:

encoding a first frame of data;

generating a first timestamp associated with the first frame of data, wherein the first timestamp includes complete timing information;

transmitting the first frame of data and the associated first timestamp to a destination;

encoding a second frame of data;

generating a second timestamp associated with the second frame of data, wherein the second timestamp includes a portion of the complete timing information; and

transmitting the second frame of data and the associated second timestamp to the destination.

2. A method as recited in claim 1 further comprising:

encoding a third frame of data;

generating a third timestamp associated with the third frame of data, wherein the third timestamp includes a portion of the complete timing information; and

transmitting the third frame of data and the associated third timestamp to the destination.

1           3.    A method as recited in claim 1 further comprising:  
2           identifying timing information related to transmitting the first and second  
3 frames of data; and  
4           transmitting the timing information to the destination.

5  
6           4.    A method as recited in claim 1 wherein the first timestamp includes  
7 hour information, minute information, second information, and a frame number.

8  
9           5.    A method as recited in claim 1 wherein the first timestamp includes  
10 an offset value that is used to relate the time associated with a frame of data to true  
11 time.

12  
13           6.    A method as recited in claim 1 wherein the second timestamp  
14 includes a frame number.

15  
16           7.    A method as recited in claim 1 further comprising:  
17           encoding a plurality of frames of data; and  
18           generating additional timestamps associated with each of the plurality of  
19 frames of data, wherein the majority of the additional timestamps include a portion  
20 of the complete timing information.

1           **8.**     A method as recited in claim 1 further comprising:  
2           encoding a plurality of frames of data;  
3           generating a full timestamp associated with one of the plurality of frames of  
4 data, wherein the full timestamp includes the complete timing information; and  
5           generating a plurality of compressed timestamps associated with the frames  
6 of data that are not associated with the full timestamp, wherein the compressed  
7 timestamps include a portion of the complete timing information.

8  
9           **9.**     One or more computer-readable memories containing a computer  
10 program that is executable by a processor to perform the method recited in claim  
11 1.

12  
13           **10.**    A method comprising:  
14           identifying multimedia content to be encoded;  
15           encoding the identified multimedia content into a plurality of frames of  
16 data;  
17           generating a plurality of full timestamps associated with a portion of the  
18 frames of data, wherein each full timestamp contains complete time information;  
19 and  
20           generating a plurality of compressed timestamps associated with frames of  
21 data that are not associated with a full timestamp, wherein each compressed  
22 timestamp contains a portion of the complete time information.

1           **11.**    A method as recited in claim 10 wherein the full timestamps are  
2 associated with every Xth frame of data.

3  
4           **12.**    A method as recited in claim 10 wherein the full timestamps are  
5 associated with frames of data spaced apart by a predetermined time period.

6  
7           **13.**    A method as recited in claim 10 wherein the full timestamps include  
8 hour information, minute information, second information, and a frame number.

9  
10          **14.**    A method as recited in claim 10 wherein the full timestamps include  
11 an offset value that is used to relate the time associated with a frame of data to true  
12 time.

13  
14          **15.**    A method as recited in claim 10 wherein the compressed timestamps  
15 include a frame number.

16  
17          **16.**    A method as recited in claim 10 further comprising storing the  
18 frames of data and the associated timestamps.

19  
20          **17.**    A method as recited in claim 10 further comprising transmitting the  
21 frames of data and the associated timestamps to a plurality of destinations.

1           **18.**    One or more computer-readable memories containing a computer  
2 program that is executable by a processor to perform the method recited in claim  
3 10.

4  
5           **19.**    A method comprising:  
6       receiving a first frame of data;  
7       receiving a first timestamp associated with the first frame of data, wherein  
8 the first timestamp includes complete timing information for the first frame of  
9 data;  
10      receiving a second frame of data; and  
11      receiving a second timestamp associated with the second frame of data,  
12 wherein the second timestamp includes a portion of the timing information.

13  
14           **20.**    A method as recited in claim 19 further comprising decoding the  
15 first frame of data and the second frame of data.

16  
17           **21.**    A method as recited in claim 19 further comprising:  
18       receiving a third frame of data;  
19       receiving a third timestamp associated with the third frame of data, wherein  
20 the third timestamp includes a portion of the timing information; and  
21       decoding the third frame of data.

1           **22.**    A method as recited in claim 19 further comprising receiving timing  
2 information related to the manner in which frames of data are transmitted from a  
3 data source.

4  
5           **23.**    A method as recited in claim 19 wherein the first timestamp is a full  
6 timestamp and the second timestamp is a compressed timestamp.

7  
8           **24.**    A method as recited in claim 19 wherein receiving the first  
9 timestamp includes updating all timing parameters with the information contained  
10 in the first timestamp.

11  
12           **25.**    A method as recited in claim 19 wherein receiving the second  
13 timestamp includes updating timing parameters with the information contained in  
14 the second timestamp.

15  
16           **26.**    One or more computer-readable memories containing a computer  
17 program that is executable by a processor to perform the method recited in claim  
18 19.

1           **27.** One or more computer-readable media having stored thereon a  
2 computer program that, when executed by one or more processors, causes the one  
3 or more processors to:

4           encode a first frame of data;

5           generate a first timestamp associated with the first frame of data, wherein  
6 the first timestamp includes complete time information;

7           encode a plurality of subsequent frames of data; and

8           generate a plurality of subsequent timestamps, wherein each of the  
9 subsequent timestamps includes a portion of the time information.

10  
11           **28.** One or more computer-readable media as recited in claim 27  
12 wherein the complete time information includes hour information, minute  
13 information, second information, and a frame number.

14  
15           **29.** One or more computer-readable media as recited in claim 27  
16 wherein each of the subsequent timestamps includes a frame number.

1       **30.**     An apparatus comprising:

2       an encoded multimedia content source; and

3       a decoder coupled to receive encoded multimedia content from the encoded  
4 multimedia content source, wherein the video content includes a first frame of data  
5 having an associated first timestamp, such that the first timestamp includes  
6 complete timing information for the first frame of data, and wherein the encoded  
7 multimedia content includes a second frame of data having an associated second  
8 timestamp, such that the second timestamp includes a subset of the timing  
9 information included in the first timestamp.

10  
11       **31.**     An apparatus as recited in claim 30 wherein the decoder is  
12 configured to decode the first frame of data and the second frame of data.  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25